

RAW SEQUENCE LISTING

DATE: 03/26/2003

PATENT APPLICATION: US/09/825,517A

TIME: 12:43:09

Input Set : A:\DYX-0161(34211005001).txt

Output Set: N:\CRF4\03262003\I825517A.raw

64 <223> OTHER INFORMATION: Xaa is Gln, Leu or Gly
W--> 66 <221> VARIANT
67 <222> LOCATION: (11)...(11)
68 <223> OTHER INFORMATION: Xaa is Ala, Trp or Tyr
W--> 70 <221> VARIANT
71 <222> LOCATION: (12)...(12)
72 <223> OTHER INFORMATION: Xaa is Ala, Gly, His, Phe, Thr or Val
W--> 74 <221> VARIANT
75 <222> LOCATION: (14)...(14)
76 <223> OTHER INFORMATION: Xaa is Asn, Gln, Phe, Ser or Val
W--> 78 <221> VARIANT
79 <222> LOCATION: (15)...(15)
80 <223> OTHER INFORMATION: Xaa is Arg, Leu, Pro or Ser
W--> 82 <221> VARIANT
83 <222> LOCATION: (16)...(16)
84 <223> OTHER INFORMATION: Xaa is Leu, Ser, Trp or Tyr
W--> 86 <400> 1
W--> 87 Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa
88 1 5 10 15
91 <210> SEQ ID NO: 2
92 <211> LENGTH: 16
93 <212> TYPE: PRT
94 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: Family of preferred CEA binding moieties
W--> 99 <221> NAME/KEY: VARIANT
100 <222> LOCATION: 1
101 <223> OTHER INFORMATION: Xaa is Asn or Asp
W--> 103 <221> VARIANT
104 <222> LOCATION: 6
105 <223> OTHER INFORMATION: Xaa is Phe, Met, Leu or Asn
W--> 107 <221> VARIANT
108 <222> LOCATION: 7
109 <223> OTHER INFORMATION: Xaa is Asp, Gly, Ile, Lys, Phe or Thr
W--> 111 <221> VARIANT
112 <222> LOCATION: 9
113 <223> OTHER INFORMATION: Xaa is Arg, Asn, Asp, Glu, Gly or Trp
W--> 115 <221> VARIANT
116 <222> LOCATION: 12
117 <223> OTHER INFORMATION: Xaa is Ala, Gly, His, Phe, Thr, Tyr or Val
W--> 119 <221> VARIANT
120 <222> LOCATION: (15)...(15)
121 <223> OTHER INFORMATION: Xaa is Arg, Leu, Pro or Ser
W--> 123 <221> VARIANT
124 <222> LOCATION: (16)...(16)
125 <223> OTHER INFORMATION: Xaa is Leu, Ser, Trp or Tyr
W--> 127 <400> 2
W--> 128 Xaa Trp Val Cys Glu Xaa Xaa Lys Xaa Gln Trp Xaa Cys Asn Xaa Xaa
129 1 5 10 15

RAW SEQUENCE LISTING

DATE: 03/26/2003

PATENT APPLICATION: US/09/825,517A

TIME: 12:43:09

Input Set : A:\DYX-0161(34211005001).txt

Output Set: N:\CRF4\03262003\I825517A.raw

132 <210> SEQ ID NO: 3
133 <211> LENGTH: 10
134 <212> TYPE: PRT
135 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: CEA binding loop
W--> 140 <221> NAME/KEY: VARIANT
141 <222> LOCATION: 2
142 <223> OTHER INFORMATION: Xaa is Asn, Glu or Met
W--> 144 <221> VARIANT
145 <222> LOCATION: 3
146 <223> OTHER INFORMATION: Xaa is Asn, Leu, Met or Phe
W--> 148 <221> VARIANT
149 <222> LOCATION: 4
150 <223> OTHER INFORMATION: Xaa is Asp, Gly, Ile, Lys, Phe or Thr
W--> 152 <221> VARIANT
153 <222> LOCATION: 5
154 <223> OTHER INFORMATION: Xaa is Ala, Gln, Gly, Lys or Thr
W--> 156 <221> VARIANT
157 <222> LOCATION: 6
158 <223> OTHER INFORMATION: Xaa is Arg, Asn, Asp, Glu or Gly
W--> 160 <221> VARIANT
161 <222> LOCATION: (7)...(7)
162 <223> OTHER INFORMATION: Xaa is Gln, Gly or Leu
W--> 164 <221> VARIANT
165 <222> LOCATION: (8)...(8)
166 <223> OTHER INFORMATION: Xaa is Ala, Trp or Tyr
W--> 168 <221> VARIANT
169 <222> LOCATION: (9)...(9)
170 <223> OTHER INFORMATION: Xaa is Ala, Gly, His, Phe, Thr or Val
W--> 172 <400> 3
W--> 173 Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys
174 1 5 10
177 <210> SEQ ID NO: 4
178 <211> LENGTH: 16
179 <212> TYPE: PRT
180 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: CEA binding polypeptide
185 <400> SEQUENCE: 4
186 Asn Trp Val Cys Asn Leu Phe Lys Asn Gln Trp Phe Cys Asn Ser Tyr
187 1 5 10 15
190 <210> SEQ ID NO: 5
191 <211> LENGTH: 16
192 <212> TYPE: PRT
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: CEA binding polypeptide
198 <400> SEQUENCE: 5

RAW SEQUENCE LISTING

DATE: 03/26/2003

PATENT APPLICATION: US/09/825,517A

TIME: 12:43:09

Input Set : A:\DYX-0161(34211005001).txt

Output Set: N:\CRF4\03262003\I825517A.raw

199 Asp Trp Val Cys Glu Asn Lys Lys Asp Gln Trp Thr Cys Asn Leu Leu
200 1 5 10 15

203 <210> SEQ ID NO: 6

204 <211> LENGTH: 16

205 <212> TYPE: PRT

206 <213> ORGANISM: Artificial Sequence

208 <220> FEATURE:

209 <223> OTHER INFORMATION: CEA binding polypeptide

211 <400> SEQUENCE: 6

212 Asn Trp Asp Cys Met Phe Gly Ala Glu Gly Trp Ala Cys Ser Pro Trp

213 1 5 10 15

216 <210> SEQ ID NO: 7

217 <211> LENGTH: 16

218 <212> TYPE: PRT

219 <213> ORGANISM: Artificial Sequence

221 <220> FEATURE:

222 <223> OTHER INFORMATION: CEA binding polypeptide

224 <400> SEQUENCE: 7

225 Asp Trp Val Cys Glu Lys Thr Thr Gly Gly Tyr Val Cys Gln Pro Leu

226 1 5 10 15

229 <210> SEQ ID NO: 8

230 <211> LENGTH: 16

231 <212> TYPE: PRT

232 <213> ORGANISM: Artificial Sequence

234 <220> FEATURE:

235 <223> OTHER INFORMATION: CEA binding polypeptide

237 <400> SEQUENCE: 8

238 Asn Trp Phe Cys Glu Met Ile Gly Arg Gln Trp Gly Cys Val Pro Ser

239 1 5 10 15

242 <210> SEQ ID NO: 9

243 <211> LENGTH: 16

244 <212> TYPE: PRT

245 <213> ORGANISM: Artificial Sequence

247 <220> FEATURE:

248 <223> OTHER INFORMATION: CEA binding polypeptide

250 <400> SEQUENCE: 9

251 Asp Trp Val Cys Asn Phe Asp Gln Gly Leu Ala His Cys Phe Pro Ser

252 1 5 10 15

255 <210> SEQ ID NO: 10

256 <211> LENGTH: 12

257 <212> TYPE: PRT

258 <213> ORGANISM: Artificial Sequence

260 <220> FEATURE:

261 <223> OTHER INFORMATION: Parental domain for design of microprotein display

262 library

W--> 264 <221> NAME/KEY: VARIANT

265 <222> LOCATION: (1)...(12)

266 <223> OTHER INFORMATION: amino acid positions 4 and 9 are invariant Cys;

267 all other positions Xaa are varied but not Cys, to

RAW SEQUENCE LISTING

DATE: 03/26/2003

PATENT APPLICATION: US/09/825,517A

TIME: 12:43:09

Input Set : A:\DYX-0161(34211005001).txt

Output Set: N:\CRF4\03262003\I825517A.raw

268 provide a library of 2x10(8) different peptides
269 based on the template sequence

W--> 271 <221> VARIANT
272 <222> LOCATION: 1, 2, 3, 5, 6, 7, 8, 10, 11, 12
273 <223> OTHER INFORMATION: Xaa = Any Amino Acid except Cys

W--> 275 <400> 10

W--> 276 Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa
277 1 5 10
280 <210> SEQ ID NO: 11
281 <211> LENGTH: 11
282 <212> TYPE: PRT
283 <213> ORGANISM: Artificial Sequence
285 <220> FEATURE:
286 <223> OTHER INFORMATION: Parental domain for design of microprotein display
287 library

W--> 289 <221> NAME/KEY: VARIANT
290 <222> LOCATION: (1)...(11)
291 <223> OTHER INFORMATION: amino acid positions 3 and 9 are invariant Cys;
292 all other positions Xaa are varied but not Cys, to
293 provide a library of 1x10(9) different peptides
294 based on the template sequence

W--> 296 <221> VARIANT
297 <222> LOCATION: 1, 2, 4, 5, 6, 7, 8, 10, 11
298 <223> OTHER INFORMATION: Xaa = Any Amino Acid except Cys

W--> 300 <400> 11

W--> 301 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
302 1 5 10
305 <210> SEQ ID NO: 12
306 <211> LENGTH: 12
307 <212> TYPE: PRT
308 <213> ORGANISM: Artificial Sequence
310 <220> FEATURE:
311 <223> OTHER INFORMATION: Parental domain for design of microprotein display
312 library

W--> 314 <221> NAME/KEY: VARIANT
315 <222> LOCATION: (1)...(12)
316 <223> OTHER INFORMATION: amino acid positions 3 and 10 are invariant Cys;
317 all other positions Xaa are varied but not Cys, to
318 provide a library of 1x10(9) different peptides
319 based on the template sequence

W--> 321 <221> VARIANT
322 <222> LOCATION: 1, 2, 4, 5, 6, 7, 8, 9, 11, 12
323 <223> OTHER INFORMATION: Xaa = Any Amino Acid except Cys

W--> 325 <400> 12

W--> 326 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
327 1 5 10
330 <210> SEQ ID NO: 13
331 <211> LENGTH: 16
332 <212> TYPE: PRT

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/825,517A

DATE: 03/26/2003
TIME: 12:43:10

Input Set : A:\DYX-0161(34211005001).txt
Output Set: N:\CRF4\03262003\I825517A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. ~~1,2,3,4,5,6,7,8,9,10,11,12,14,15,16~~
Seq#:2; Xaa Pos. ~~1,6,7,9,12,15,16~~
Seq#:3; Xaa Pos. ~~2,3,4,5,6,7,8,9~~
Seq#:10; Xaa Pos. ~~1,2,3,5,6,7,8,10,11,12~~
Seq#:11; Xaa Pos. ~~1,2,4,5,6,7,8,10,11~~
Seq#:12; Xaa Pos. 1,2,4,5,6,7,8,9,11,12
Seq#:13; Xaa Pos. 1,2,3,5,6,7,8,9,10,11,12,14,15,16
Seq#:14; Xaa Pos. 1,2,3,5,6
Seq#:15; Xaa Pos. 5,6,7,8,9
Seq#:16; Xaa Pos. 8,9,10,11,12
Seq#:17; Xaa Pos. 11,12,14,15,16
Seq#:18; Xaa Pos. 6,7,9,12,15
Seq#:19; Xaa Pos. 5,6,7,9,12
Seq#:20; Xaa Pos. 1,3,14,15,16
Seq#:23; Xaa Pos. 6,7,9,12,15
Seq#:29; Xaa Pos. 1,2,3,5,6
Seq#:30; Xaa Pos. 5,6,7,8,9
Seq#:31; Xaa Pos. 8,9,10,11,12
Seq#:32; Xaa Pos. 11,12,14,15,16
Seq#:33; Xaa Pos. 6,7,9,12,15
Seq#:34; Xaa Pos. 5,6,7,9,12
Seq#:35; Xaa Pos. 1,3,14,15,16
Seq#:36; Xaa Pos. 1,3,5,6,7,8,9,10,12,14,15,16
Seq#:110; Xaa Pos. 2,3,4,5,6,7,8,9
Seq#:111; Xaa Pos. 1,2,3,5,6,7,8,9,10,11,12,14,15,16

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/825,517A

DATE: 03/26/2003

TIME: 12:43:10

Input Set : A:\DYX-0161(34211005001).txt

Output Set: N:\CRF4\03262003\I825517A.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 L:30 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:34 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:38 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:42 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:46 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:50 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:54 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:58 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:62 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:66 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:70 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:74 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:78 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:82 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:86 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
 L:87 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
 L:99 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:103 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
 L:107 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
 L:111 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
 L:115 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
 L:119 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
 L:123 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
 L:127 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
 L:128 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
 L:140 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:144 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
 L:148 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
 L:152 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
 L:156 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
 L:160 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
 L:164 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
 L:168 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
 L:172 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
 L:173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
 L:264 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:271 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:10
 L:275 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:10
 L:276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
 L:289 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:296 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:11
 L:300 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:11
 L:301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
 L:314 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:321 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:12
 L:325 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:12
 L:326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/825,517A

DATE: 03/26/2003

TIME: 12:43:10

Input Set : A:\DYG-0161(34211005001).txt

Output Set : N:\CRF4\03262003\I825517A.raw

L:339 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:346 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:13
 L:350 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:13
 L:351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
 L:364 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:368 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:14
 L:372 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:14
 L:376 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:14
 L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
 L:390 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:394 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15
 L:400 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15
 L:401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
 L:413 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:417 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16
 L:421 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:16
 L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
 L:435 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:439 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:17
 L:443 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:17
 L:447 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:17
 L:448 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
 L:461 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:465 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18
 L:469 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18
 L:473 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18
 L:482 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
 L:495 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:512 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
 L:525 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:542 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
 L:581 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
 L:695 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:708 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
 L:721 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
 L:743 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:752 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
 L:765 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:778 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
 L:791 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:813 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
 L:826 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
 L:857 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:874 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
 L:886 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
 L:940 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0

VERIFICATION SUMMARY

DATE: 03/26/2003

PATENT APPLICATION: US/09/825,517A

TIME: 12:43:10

Input Set : A:\DYX-0161(34211005001).txt

Output Set: N:\CRF4\03262003\I825517A.raw

L:1912 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:1950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:110 after pos.:0
L:1962 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:2025 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111 after pos.:0



Creation date: 10-14-2003
Indexing Officer: HNGUYEN28 - HAO NGUYEN
Team: OIPEBackFileIndexing
Dossier: 09825517

Legal Date: 07-24-2003

No.	Doccode	Number of pages
1	IDS	4
2	FOR	60

Total number of pages: 64

Remarks:

Order of re-scan issued on